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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,402	12/21/2000	Roy R. Fleshman	89.0426	1133

7590

04/04/2002

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EXAMINER

LAM, THANH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 04/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,402

Applicant(s)

Flesham et al.

Examiner

Thanh Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election filed on 12/12/2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 20) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Claims 15-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected group II claims 14-19. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "fluidicly" in claims 3-4, it could not be found in an English dictionary for understanding, therefore, it is vague and indefinite, while the accepted term is "fluidly or fluidally."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ekstromer.

Ekstromer discloses an electric motor, comprising: a plurality of motor sections (17), wherein the plurality of motor sections are mechanically (the mating between the upper frame 22 and the lower frame 22 of fig. 4) and electrically (38) coupleable to form a motor of a desired length, each motor section including a modular rotor section (24) and a modular stator section (25).

Regarding claim 2, Ekstromer discloses (fig. 2) the plurality of motor sections (17) includes: a first motor section (the middle 17) having a first rotor section (the middle 24) and a first stator section (middle 25); and a second motor section (the top 17) having a second rotor section (the top 24) coupleable to the first rotor section (the top 24) and a second stator section (the top 25) electrically coupleable to the first stator section, wherein electricity (38) flowing through the first and second stator sections produces a magnetic field to impart rotative motion in the rotor.

Regarding claim 7, Ekstromer discloses at least one modular stator section has a plurality of conductors (38) terminating at a plurality of corresponding protrusions (37).

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Regarding claim 8, Ekstromer discloses at least one other modular stator section includes a plurality of conductive elements (38) configured for engagement with the plurality of corresponding protrusions (37) when the plurality of motor sections are mechanically coupled.

Regarding claim 9, Ekstromer discloses the plurality of conductive elements each include a hollow receptacle (36) configured to receive a corresponding protrusion (37).

Regarding claim 10, Ekstromer discloses a separate coupler (37) disposed between the first and second motor sections to provide a mechanical and electrical coupling.

Regarding claim 11, Ekstromer discloses at least one of the plurality of motor sections includes an outer housing (22) having a threaded collar (thread portion to match with bolt 39) designed to engage an outer housing of the next sequential motor section.

Regarding claim 12, Ekstromer discloses a submersible pumping system, comprising: a submersible electric motor (16), having a plurality of motor sections (17, fig. 2), wherein the plurality of motor sections are mechanically (22,29) and electrically (36,38) coupleable to form a motor of a desired length, each motor section including a modular rotor section (24) coupleable to a next adjacent modular rotor section (the middle rotor 24) of a next adjacent motor section to form a rotor; and a submersible pump (12) drivingly coupled to the rotor of the submersible electric motor.

Regarding claim 13, Ekstromer discloses the plurality of motor sections includes: a first motor section (upper 17) having a first rotor section (24) and a first stator section (25) ; and a second motor section (middle 17) having a second rotor section coupleable to the first rotor

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section (middle 24) and a second stator section electrically (36,38) coupleable to the first stator section, wherein electricity flowing through the first and second stator sections produces a magnetic field to impart rotative motion in the rotor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekstromer in view of Schob (pn. 5,939,813).

Ekstromer discloses all aspect of claimed invention except for stator/motor sections are fluidly coupleable to allow a fluid flow therethrough.

Schob (fig. 3) discloses stator sections (3) are fluidly coupleable to allow a fluid flow (7a-c) therethrough, the purpose of the fluid flow is for cooling the stator/motor sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stator/motor sections of Ekstromer to accommodate the stator/motor sections

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to allow the fluid flows therethrough as taught by Schob. The fluid flows between the stator/motor sections in order to provide an improvement of cooling of the stator sections.

Regarding claim 5, the second motor section (17 of Ekstromer) is fluidly coupleable to an external device (2 of Schob).

Regarding claim 14, a motor protector (32 of Ekstromer), wherein the plurality of motor sections are fluidly coupleable to allow fluid to pass (taught by Schob) between the first motor section and the motor protector.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ekstromer in view of Rabson.

Ekstromer discloses all aspect of claimed invention except for a seal disposed between the first motor section end and the second motor section.

Rabson disclose a seal (115) for shielding

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the motor sections of Esktromer and disposed the seal as taught by Rabson to improve shielding of the motor sections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

A handwritten signature in black ink, appearing to read 'Thanh Lam'. The signature is written in a cursive style with a long horizontal line extending from the top left.

Thanh Lam

Patent Examiner

April 2, 2002